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PO BOX 747	CU VA 22040 0747	BROOKS, KRISTIE LATRICE		
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			1616	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/568,510	BUBERL ET AL.
Office Action Summary	Examiner	Art Unit
	KRISTIE L. BROOKS	1616
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLEWHICHEVER IS LONGER, FROM THE MAILING DEVELOPMENT OF THE MAILING	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin 1 will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 13 c This action is FINAL . 2b) ☑ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-14 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers	awn from consideration.	
9)☐ The specification is objected to by the Examin	or	
10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by the lead of a cepted or b) for objected to by the lead of a cepted of the drawing o	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreig a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of th	nts have been received. Its have been received in Applicationity documents have been received au (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 13, 2009 has been entered.

Status of Application

- 1. Claims 1-14 are pending.
- Receipt and consideration of Applicants amendments/remarks July 13,
 acknowledged.
- 3. Rejections not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "...a non-phytotoxic, effective *plant growth promoting* amount of an amide compound..." However, Applicant has amended the claim to remove "plants in need of growth promotion." Thus, it is unclear what applicant intends by the phrase.

For purposes of examination, the Examiner has interpreted the claim to read "...a non-phytotoxic, effective amount of an amide compound..."

Further, it is unclear in claim 1, what amount Applicant intends to encompass by the recitation of "non-phytotoxic effective amount". It should be noted that Applicant does not describe or define in the specification what amount encompasses the "non-phytotoxic effective amount". However, Applicant generally describes that the active compounds can be present in an amount from 0.1 to 95% by weight (see page 11 of the instant specification).

For purposes of examination, the Examiner has interpreted the "...a non-phytotoxic, effective amount" to encompass an amount ranging from 0.1 to 95% by weight, which is consistent with the amount described by Applicant in the instant specification.

Claim 6 also recites, "...wherein the plant growth promoting amount of the amide compound..." However, Applicant has amended claim 1 to remove "plants

in need of growth promotion." Thus, it is unclear what applicant intends by the phrase.

For purposes of examination, the Examiner has interpreted the claim to read "...wherein the non-phytotoxic, effective amount of an amide compound..."

Claims 2-5 and 7-14 are rejected for being dependent on a rejected claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in thisOffice action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Eicken et al. (US 6,143,745).

Eicken et al. teach compositions and methods for controlling fungi containing a solid or liquid carrier and at least one amide compound of formula I

(see the abstract, column 2 lines 63-67 and column 3 lines 1-26). The compositions can preferably contain a compound of formula la or lb

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(see column 7 and column 8 lines 1-35). The method for controlling fungi comprise treating plants, seed, soils with a composition of the invention (see column 8 lines 35-42). The weight ratio of the carrier to the amide compounds is 20:1 to 1:20 (see column 8 lines 30-34). The active compound is present in an amount of 0.1 to 95% by weight (see column 10 lines 63-65). The compositions can be applied by spraying, dusting, etc and formulated in granules (see column 8 lines 43-48). The compositions are effective in protecting crops such as grass, fruit, and vegetables and the seeds of the plants (see column 10 lines 30-35). The fungicidal composition can be applied at rates from 0.002 to 3 kg, of active compound per ha or 0.001 to 50g per kg of seed (see column 10 lines 66-67 and column 11 lines 1-3). The compounds of the invention can be combined with other fungicides to increase fungicidal spectrum (see column 11 lines 8-9). Examples of fungicides include strobilurins, such as methyl E-methoximino-[α-(o-tolyloxy)-o-tolyl]acetate, methyl E-2-[2-[6-(2-cyanophenoxy)pyrimidin-4yloxy]phenyl]-3-methoxyacrylate, methyl E-methoximino- $[\alpha-(2,5-dimethyloxy)-o$ tolyl]acetamide (see column 12 lines 54-58). The compounds of the invention can be applied together, separately, or in succession (see column lines 40-41).

Use Example 1 and 2 disclose compositions comprising 80% by weight boscalid (compound 1.2), being applied to the seedlings of paprika and slices of green peppers.

With respect to the instant limitation, "i.e. A method of regulating plant growth...", it is the Examiner's position that since there are no materials or

method steps recited in the instant claims that differ from the method taught by Eicken et al, the instant limitation will inherently be met upon application to said plant.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 9. Claims 1-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eicken et al. (US 6,143,745).

Application Claims

Applicant claims a method for regulating plant growth, comprising applying to said plants, to the seeds from which they grow or to the locus in which they

grow, a non-phytotoxic, effective amount of an amide compound having the formula I

A-CO-N R¹R².

Determination of the scope and content of the prior art (MPEP 2141.01)

Eicken et al. teach compositions and methods for controlling fungi containing a solid or liquid carrier and at least one amide compound of formula I $\text{A-CO-N R}^1 \text{R}^2$

(see the abstract, column 2 lines 63-67 and column 3 lines 1-26). The compositions can preferably contain a compound of formula la or lb

(see column 7 and column 8 lines 1-35). The method for controlling fungi comprise treating plants, seed, soils with a composition of the invention (see column 8 lines 35-42). The weight ratio of the carrier to the amide compounds is 20:1 to 1:20 (see column 8 lines 30-34). The active compound is present in an amount of 0.1 to 95% by weight (see column 10 lines 63-65). The compositions can be applied by spraying, dusting, etc and formulated in granules (see column 8 lines 43-48). The compositions are effective in protecting crops such as grass, fruit, and vegetables and the seeds of the plants (see column 10 lines 30-35).

The fungicidal composition can be applied at rates from 0.002 to 3 kg, of active compound per ha or 0.001 to 50g per kg of seed (see column 10 lines 66-67 and column 11 lines 1-3). The compounds of the invention can be combined with other fungicides to increase fungicidal spectrum (see column 11 lines 8-9). Examples of fungicides include strobilurins, such as methyl E-methoximino-[α -(o-tolyloxy)-o-tolyl]acetate, methyl E-2-[2-[6-(2-cyanophenoxy)pyrimidin-4-yloxy]phenyl]-3-methoxyacrylate, methyl E-methoximino-[α -(2,5-dimethyloxy)-o-tolyl]acetamide (see column 12 lines 54-58). The compounds of the invention can be applied together, separately, or in succession (see column lines 40-41).

Use Example 1 and 2 disclose boscalid (compound 1.2) being applied to the seedlings of paprika and slices of green peppers.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Eicken et al. do not exemplify applying a compound of formula lb to said plants. Eicken et al. further do not teach exemplify applying a compound of formula I and a strobilurin to plants.

Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)

One of ordinary skill in the art would have been motivated apply a compound of formula lb to said plants because Eicken et al. suggests the application of the same instant compounds to plants for controlling fungi.

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Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply a compound of formula lb to said plants because it is an obvious variation of compounds that are capable of treating the plants against fungal attacks that may damage or destroy crops, thereby promoting the growth of said plants.

Although Eicken et al. do not exemplify the application of a compound of formula I and a strobilurin, it would have been obvious to one of ordinary skill in the art since Eicken et al. suggests that the combination of compounds of formula I and other fungicides such as strobilurins can broaden the spectrum of fungicidal activity. Thus, one of ordinary skill would have used the combination if one wanted to broaden the protection against fungi.

With respect to the instant limitation, "i.e. A method of regulating plant growth...", it is the Examiner's position that since there is not difference between the materials, amount used, or method steps recited in the instant claims and prior art reference Eicken et al, the instant limitation will inherently be met upon application to said plant. Furthermore, one of ordinary skill can reasonably assume that since the compounds are being used to protect susceptible plants against fungal attacks that may damage crops, an increase in grow of the plants will ultimately occur.

With respect to claim 6 and the plant growth regulating effects, it is the Examiners position that since the prior art teaches the same compounds in the same amount instantly claimed, the plant growth regulating effects instantly claimed will implicitly occur upon application to the plant.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

10. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eicken et al. (US 6,143,745) in view of Asrar et al. (US 2003/0060371).

Application Claims

Applicant claims a method for regulating plant growth, comprising applying to said plants, to the seeds from which they grow or to the locus in which they grow, a non-phytotoxic, effective amount of an amide compound having the formula I

A-CO-N R¹R².

Determination of the scope and content of the prior art (MPEP 2141.01)

Eicken et al. teach compositions and methods for controlling fungi containing a solid or liquid carrier and at least one amide compound of formula I

(see the abstract, column 2 lines 63-67 and column 3 lines 1-26). The compositions can preferably contain a compound of formula la or lb

(see column 7 and column 8 lines 1-35). The method for controlling fungi comprise treating plants, seed, soils with a composition of the invention (see column 8 lines 35-42). The weight ratio of the carrier to the amide compounds is 20:1 to 1:20 (see column 8 lines 30-34). The active compound is present in an amount of 0.1 to 95% by weight (see column 10 lines 63-65). The compositions can be applied by spraying, dusting, etc and formulated in granules (see column 8 lines 43-48). The compositions are effective in protecting crops such as grass, fruit, and vegetables and the seeds of the plants (see column 10 lines 30-35). The fungicidal composition can be applied at rates from 0.002 to 3 kg, of active compound per ha or 0.001 to 50g per kg of seed (see column 10 lines 66-67 and column 11 lines 1-3). The compounds of the invention can be combined with other fungicides to increase fungicidal spectrum (see column 11 lines 8-9). Examples of fungicides include strobilurins, such as methyl E-methoximino-[α-(o-tolyloxy)-o-tolyl]acetate, methyl E-2-[2-[6-(2-cyanophenoxy)pyrimidin-4vloxy]phenyl]-3-methoxyacrylate, methyl E-methoximino-[α-(2,5-dimethyloxy)-otolyl]acetamide (see column 12 lines 54-58). The compounds of the invention can be applied together, separately, or in succession (see column lines 40-41).

Use Example 1 and 2 disclose boscalid (compound 1.2) being applied to the seedlings of paprika and slices of green peppers.

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Eicken et al. do not teach the ratio of the amide compound to a strobilurin. Eicken do not teach strobilurin, pyraclostrobin. However, Asrar et al. teach strobilurins, such as pyraclostrobin present in fungicidal compositions in the amount of 0.01 to 95% by weight.

Asrar et al. teach methods of improving the yield and vigor of plants by protection against fungal plant pathogens with a compositions comprising active agents such as strobilurin fungicides, diazole, and triazole fungicides (see the abstract). Examples of strobilurin type fungicides include azoxtstrobin, dimoxystrobin, famoxadone, kresoxim-methyl, metominostrobin, picoxystrobin, pyraclostrobin and trifloxystrobin (see page 5 paragraph 52). The active ingredient can be present in the amount of 0.01 to 95% (see page 17 paragraph 366).

Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)

One of ordinary skill in the art would have been motivated to use the instant ratio of 20:1 to 1:20 for the compound of formula I and a strobilurin, because Eicken et al. suggests compounds of formula I can be combined with strobilurins. Although Eicken et al. do not teach the amount of strobilurins that present, Eicken et al. suggests the compounds of formula I can be present in the amount of 0.01 to 95% and it is already know in the art that strobilurins can be

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present in the amount of 0.01 to 95% by weight in fungicidal compositions as suggested by Asrar et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the instant ratio, because both the compounds of formula I and strobilurins can be present in various amounts in fungicidal compositions as suggested by both Eicken et al. and Asrar et al. and it is merely process optimization, in which one of ordinary skill in the art would vary the amount of active components necessary in order to achieve success results.

Although Eicken et al. do not teach strobilurin, pyraclostrobin, it would have been obvious to one of ordinary skill in the art to use pyraclostrobin because it is an obvious variation of strobilurins that can be used in fungicidal compositions as suggested by Asrar et al.

Therefore, the claimed invention would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

Response to Arguments

Applicant's arguments filed July 13, 2009 have been fully considered but they are not persuasive.

Applicant argues that Eicken et al teach the instant compound and their use for controlling harmful fungi, but do not describe a growth regulating effect.

Applicant further points to Examples in the specification (see page 15 and 16) to further establish a growth regulating effect of the instant compounds. Applicant

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argues that they have defined regulating plant growth in a specific way which distinguishes the method of the present invention from pesticidal action and Eicken et al. do note teach the growth regulating action of the compounds of formula I.

These arguments are not convincing. Applicant is claiming "a method for regulating plant growth, comprising applying to said plants, to the seeds from which they grow or to the locus in which they grow, a non-phytotoxic, effective amount of an amide compound having the formula I" (see page 1). It should be noted that the specification describes "a method for regulating growth" to mean a variety of plant responses which attempt to improve some characteristic of the plant as distinguished from pesticidal action and for this reason the compounds used in the practice of this invention are used in amounts which are non-phytotoxic with respect to the plant being treated (see page 1 second paragraph).

However, the Applicant does not define or describe the "non-phytotoxic amount" that is to be used in the instant invention. To the contrary, Applicant discloses that the formulations generally comprise 0.1 to 95% by weight (see page 11 paragraph 4). Thus, one of ordinary skill in the art would assume that the use of the instant compound of formula I in the amount described by Applicant would result in "regulating plant growth".

Eicken et al. teach the instant compounds are useful for controlling fungi in crops (see the abstract, column 2 lines 63-67, column 3 lines 1-26, and column 10 lines 30-35). Eicken et al. further teach that the active compound is present in an amount of 0.1 to 95% by weight (see column 10 lines 63-65). There is no

difference between the method taught in the prior art and the method instantly claimed. The same instant compounds can be applied to plants in the same amount described in the instant specification. Thus, one of ordinary skill in the art can reasonably assume that the compounds will perform in the same manner. Furthermore, one of ordinary skill can reasonably assume that since the compounds are being used to protect susceptible plants against fungal attacks that may damage crops, an increase in grow of the plants will ultimately occur. Thus, the instant limitation of "regulating plant growth" is met by the prior art reference.

1.132 Declaration

Applicants further provide a 1.132 declaration on July 13, 2009 as evidence of the growth regulating effect of the instant compounds. Applicant provides three Examples that describe the thousand grain wheat weight, the yield of straw, and grain yield after application by Boscalid. A control was provided where the no application of the instant compounds took place. Further, the experiments were carried out under no fungal stress. Applicant asserts that there was an increase in grain weight, straw yield, and grain yield when compared to the untreated plot.

This data is not persuasive. First, it should be noted that Applicant has not tested the instant method against the closest prior art method. Thus, one of ordinary skill in the art cannot establish the unexpectedly superior results of the instant method when compared to the prior art method.

Second, the data provided only establishes a difference in degree rather than a difference in kind. The different between the grain weight, straw yield and grain yield of the treated plot (i.e. Boscalid) and untreated pot in all three examples is not great enough to establish unexpectedness. For example, in Example 1, the straw yield in the untreated pot was 65.9 g/pot whereas straw yield in the Boscalid treated pot was 67.3 g/pot. In Example 2, the grain yield of the untreated pot was 59.8 g/pot whereas the Boscalid treated pot was 62.7 g/pot. The difference in data is very small and could result from a slight difference in experimental conditions or human error. It is not enough to establish unexpected results for the instant invention. Furthermore, it is expected for a plant to have an increase in yield when the instant compounds are applied. The instant compounds are known fungicides and preventing any fungal attacks from occurring on susceptible plants will inherently promote the growth of said plant.

Third, Applicant has not provided data that is commensurate in scope with the claimed invention. Applicant has provided data for one compound. However, there are many compounds that are encompassed by the instant claim, some of which contain structurally dissimilar elements. Applicant has not provided sufficient data to establish that application of all the instantly claimed compounds to a plant would result in unexpected results.

Lastly, the data provided by Applicant does not overcome the 102 (b) rejection of record. Eicken et al. teach the same instant compounds being applied to the same plants in the same amount. There is no difference between

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the method instantly claimed and the method taught in the prior art. Applicant has not distinguished the instant invention from the prior art reference.

Therefore, Applicant's evidence of nonobviousness was not persuasive and the rejection is maintained.

Conclusion

- 11. No claims are allowed.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie L. Brooks whose telephone number is (571) 272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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ΚB

/John Pak/ Primary Examiner, Art Unit 1616